

KEY TO THE SPECIES OF ONCEROMETOPUS  
WITH DESCRIPTIONS OF FIVE NEW  
SPECIES (HEMIPTERA, MIRIDÆ)\*

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The species of *Oncerometopus* Reuter have in general a red and black aspect, and such material as has been collected in the southwestern United States has usually passed as *Oncerometopus nigriclavus* Reuter, the type of the genus. After collecting a species in the mountains of Colorado which was obviously different from *nigriclavus* Reut., and later receiving a nearly black species from Mr. A. A. Nichol collected at Kaibab Point, Arizona, I was led to make a study of all available material. The results are presented in the form of a key with descriptions of five new species.

The writer is indebted to Mr. W. L. McAtee for comparison of Texas specimens of *O. nigriclavus* Reut. with the type in Stockholm, and which he pronounced to be good homeotypes. Mr. McAtee also took notes on *O. ruber* Reut. which have proved useful. This latter species is apparently rather scarce in collections, for I have seen only a single specimen from Kansas which could be called *ruber* Reut. I also have a female paratype of the recently described *Oncerometopus californicus* Van D., which Mr. Van Duzee has kindly sent in exchange.

Only one species, *O. nitens* n. sp., has been taken east of the Mississippi river, and chiefly from Tennessee and Mississippi, with odd specimens from Alabama and North Carolina, while a single specimen has been taken at Glen Echo, Maryland. At first glance this species might be taken for a *Lopidea*, but the diverging arolia and pronotal characters place it in *Oncerometopus*.

\* Contribution from the Department of Zoology and Entomology, Iowa State College, Ames, Iowa.

Contrary to previous expectations the color pattern of the different species varies only slightly, as I have found after study of five species with a good series of each. Therefore, I have dared to simplify the key by the introduction of certain color characters, which taken alone would not be sufficient to define the species, yet prove highly useful for locating your specimens.

***Oncerometopus nicholi* new species.**

A small black form with orange stripe each side on the dorsum; distinguished by the sharply angulate pronotal margin just above coxal cleft; antennal segment II shorter than the combined length of segments III and IV.

♂. Length 4.3 mm., width 1.6 mm. Head: width 1.03 mm., vertex .52 mm.; frons moderately full, tylus as viewed from the side only slightly arcuate, not at all prominent. Rostrum, length 1.86 mm., reaching to base of fourth ventral segment. Antennæ: segment I, length .41 mm.; II, 1.29 mm., thickness .13 mm., being equal to segment I; III, .815 mm., thickness .104 mm.; IV, .65 mm.; black. Pronotum: length 1.01 mm., width at base 1.58 mm.; lateral margins nearly rectilinear, angulately prominent just above coxal cleft; collar sharply narrowed behind the eye.

Black, stripe on outer half of corium, crossing base of clavus, lateral margins of pronotal disk and more or less on propleura, orange to orange red. Venter except genital segment, juga, lora, and spot on genæ, reddish. Dorsum clothed with rather prominent blackish pubescence.

♀. Length 5 mm., width 2.1 mm. Head: width 1.09 mm., vertex .59 mm. Antennæ: segment I, length .41 mm., thickness .12 mm.; II, 1.18 mm., thickness .118 mm., tapering to more slender at base; III, .77 mm.; IV, .62 mm. Pronotum: length 1.14 mm., width at base 1.74 mm. Very similar to the male in essential structures and coloration.

*Holotype*: ♂ August 25, 1926, Kaibab Point, Arizona (A. A. Nichol); author's collection. *Allotype*: same data as the type. *Paratypes*: ♂ ♀, taken with the types. ♂ Aug. 15, 1925, Dolores, Colorado (H. H. Knight). 2 ♂, Utah (Vasco M. Tanner). Named in honor of the collector, Mr. Andrew A. Nichol.

***Oncerometopus impictus* new species.**

Allied to *nicholi* but distinguished by the different angulation of the pronotal margin; a beautiful red and black species in which the red is deeper and more broadly displayed than in *nicholi*.

♂. Length 5.3 mm., width 2.3 mm. Head: width 1.11 mm., vertex .53 mm.; frons and tylus nearly as in *nicholi*. Rostrum, length 1.95 mm., reaching upon third ventral segment. Antennæ: segment I, length .44 mm.; II,

1.45 mm., cylindrical, equal in thickness (.12 mm.) to segment I; III, .90 mm., thickness .104 mm.; IV, .69 mm.; black, clothed with short, fine, pale to dusky pubescence. Pronotum: length 1.12 mm., width at base 1.9 mm.; lateral margins of disk very slightly sinuate, not sharply angulate above top of coxal cleft; collar only slightly narrowed behind eye.

Black, broadly on lateral margins of pronotal disk, median ray behind calli, propleura except around coxal cleft, basal half of clavus, outer half of corium, embolium largely, and venter except lower half of genital segment, deep red with perhaps an orange tint. Pubescence yellowish to blackish but not so stiff or prominent as in *nicholi*.

♀. Length 5.8 mm., width 2.4 mm. Head: width 1.18 mm., vertex .61 mm. Antennæ: segment I, length .47 mm.; II, 1.3 mm., thickness .118 mm., tapering to more slender at base; III, .83 mm., about equal to greatest thickness of segment II; IV, .68 mm. Pronotum: length 1.24 mm., width at base 2.03 mm. Very similar to the male but usually a little more broadly red.

*Holotype*: ♂ August 20, 1925, Pingree Park, Colorado (H. H. Knight); author's collection. *Allotype*: same data as the type. *Paratypes*: 5 ♂ 3 ♀, June 20 and June 22, 1925, Pingree Park, Colorado (H. H. Knight); Mr. F. C. Hottes collected and kindly presented three or four of these specimens. COLORADO—5 ♀ Aug. 13, 1925, Mancos (H. H. Knight). 3 ♀ Aug. 26, 1926, North Park (B. B. Fulton). ♀ July 17, 1916, Duck Lake, alt. 11,000 ft., near Grant (L. O. Jackson). ♂ July 19, 1903, Sunset, alt. 8000 ft. (E. P. Van Duzee). ♂ ♀ "Colo." (C. F. Baker); U. S. N. M. ARIZONA—♀, Prescott (H. G. Barber). 3 ♀, "Ariz. 2123" (C. F. Baker); U. S. N. M. collection. WYOMING—♀ July, 1913, Rock River (H. G. Hungerford). ♀ Aug. 4, Yellowstone National Park.

***Oncerometopus atriscutis* new species.**

Suggestive of *nigriclavus* Reut., but with black scutellum and longer second antennal segment which in both sexes exceeds the combined length of segments III and IV.

♂. Length 5.4 mm., width 2.1 mm. Head: width 1.12 mm., vertex .55 mm.; black, lora showing some red beneath fuscous. Rostrum, length 2.3 mm., reaching upon third ventral segment. Antennæ: segment I, length .44 mm.; II, 1.77 mm., just equal to basal width of pronotum, equal to thickness of segment I, although tapering to slightly more slender near base; III, .80 mm.; IV, .59 mm.; black. Pronotum: length 1.18 mm., width at base 1.77 mm.; with a pair of punctures between calli but not impressed between outer margins of calli and anterior angles of disk as in *nigriclavus*.

Red, slightly shining, head, collar above and below, calli and usually extending back over disk and along basal margin, scutellum, clavus, narrow inner margin of corium, cuneus except narrowly on base, membrane, rostrum, sternum, legs, and lower half of genital segment, black. It is worthy of notice that while the head, pronotal disk largely, and scutellum, are black, the clavus never has more than the narrow inner margin black. Red areas with fine yellowish pubescence, elsewhere black.

♀. Length 5.9 mm., width 2.5 mm. Head: width 1.18 mm., vertex .62 mm. Antennæ: segment I, length .53 mm.; II, 1.83 mm., cylindrical, more slender than segment I; III, .89 mm.; IV, .59 mm. Pronotum: length 1.35 mm., width at base 2.07 mm. More robust than the male but very similar in coloration.

*Holotype*: ♂ June 1, 1926, Chiricahua Mts., alt. 6000 ft., Arizona (A. A. Nichol); author's collection. *Allotype*: same data as the type. *Paratypes*: 4 ♂ 4 ♀, taken with the types on *Cowania* sp. which Mr. Nichol records as the host plant. ARIZONA—♀ June 18, Ashfork (H. S. Barber). ♀, "Ariz." NEW MEXICO—15 ♂ ♀ July 7 to July 12, 1915, 10 ♂ ♀ Aug. 1 to Aug. 15, 1916, Jemez Springs (J. Woodgate). ♂ 2 ♀, Magdalena (Strickler). ♂ June 5, Faywood (W. J. Gerhard).

The present material as well as the host plant record would seem to indicate that this species occurs only in the mountainous parts of the southwestern states.

***Oncerometopus nitens* new species.**

Bright red, clavus and corium inside the radial vein black, strongly shining; distinguished by the long second antennal segment.

♂. Length 4.8 mm., width 2 mm. (larger specimens 5.6 mm.). Head: width .98 mm., vertex .49 mm.; frons less prominent than in *nigriclavus*. Rostrum, length 2.04 mm., reaching upon third ventral segment. Antennæ: segment I, length .36 mm.; II, 2.07 mm., thickness .133 mm., slightly exceeding thickness of segment I; III, .65 mm.; .71 mm. Pronotum: length 1.03 mm., width at base 1.54 mm.; lateral margins slightly sinuate, basal margin strongly rounded.

Bright red, distinctly shining, antennæ, tylus, base of vertex and more or less on frons, clavus, corium except exterior to the radial vein, cuneus except narrowly at fracture, membrane, femora except basal half of hind pair, and spot on sternum, black. Pubescence yellowish on the red areas, elsewhere black.

♀. Length 5.4 mm., width 2.1 mm. Head: width 1.03 mm., vertex .56 mm. Antennæ: segment I, length .38 mm.; II, 1.70 mm., more slender than segment I, tapering to more slender at base; III, .80 mm.; IV, broken.

Pronotum: length 1.11 mm., width at base 1.72 mm. Very similar to the male in coloration.

*Holotype*: ♂ July 7, 1921, Poplarville, Mississippi (C. J. Drake); author's collection. *Allotype*: same data as the type. *Paratypes*: ♂, taken with the types. ALABAMA—3 ♀ Oct. 24, 1916, Kushla (W. S. Adkins). GEORGIA—♂ July 16–29, 1912, Spring Creek, Decatur Co. (J. C. Bradley). MARYLAND—♀, summer 1922, Glen Echo (J. C. Bridwell). MISSISSIPPI—♂ ♀ July 30, 1921, Biloxi, ♂ July 25, Woodville; ♀ Aug. 8, 1921, Pascagouia (C. J. Drake). NORTH CAROLINA—♀ Sept. 24, 1915, Elrod (R. W. Leiby). ♂, early Oct., 1908, Raleigh (S. C. Clapp). ♀, June, 1909, Southern Pines (A. H. Manee). TENNESSEE—♂ ♀ Aug. 15, 1916, alt. 2000 ft., La Follette (W. S. Adkins).

***Oncerometopus nasutus* new species.**

Suggestive of *nigriclavus* Reut., but distinguished by the strongly angulate tylus, longer second antennal segment, with first two segments largely yellowish to brown.

♂. Length 5.8 mm., width 2.1 mm. Head: width 1.06 mm., vertex .56 mm.; tylus angulately prominent on base. Rostrum, length 2.04 mm., scarcely attaining posterior margins of hind coxæ. Antennæ: segment I, length .52 mm., yellowish brown, darker at tip and near base; II, 2.28 mm., cylindrical, equal in thickness (.148 mm.) to segment I, yellowish brown, a blackish annulus at base; III, .83 mm.; IV, broken. Pronotum: length 1.21 mm., width at base 1.98 mm.; lateral margins distinctly sinuate, anterior angles above top of coxal cleft scarcely evident.

Color light orange red, lower half of head lighter, antennæ largely yellowish to brownish, apical half of rostrum, clavus, narrow inner margin of clavus, tip of cuneus, membrane, apical one-fourth of hind femora, tibiæ and tarsi, black. Pubescence yellowish, surface dull as in *nigriclavus*.

♀. Length 5.9 mm., width 2.5 mm. Head: width 1.09 mm., vertex .62 mm. Antennæ: segment I, length .47 mm.; II, 1.9 mm., more slender than segment I; III, .86 mm.; IV, .59 mm.; black, apical half of segment II brownish. Pronotum: length 1.24 mm., width at base 2.1 mm. Very similar to the male in coloration.

*Holotype*: ♂ Aug. 26, 1925, Sterling, Colorado (H. H. Knight); author's collection. *Allotype*: same data as the type. *Paratype*: ♂ Aug. 25, Hudson, Colorado (H. H. Knight); this specimen rather small (length 4.3 mm.) but otherwise very similar to the male type.

## KEY TO THE SPECIES OF ONCEROMETOPUS

- |  |                           |
|--|---------------------------|
| 1. Scutellum red .....   | 2                         |
| Scutellum black .....  | 6                         |
| 2. Clavus black .....  | 3                         |
| Clavus reddish, tibiæ largely pale .....   | <i>ruber</i> Reut.        |
| 3. Tylus angulately prominent on base, equally prominent as the frons;<br>antennal segments I and II largely yellowish.....  | <i>nasutus</i> n. sp.     |
| Tylus not angulately prominent at base, frons more prominent than<br>tylus .....   | 4                         |
| 4. Antennal segment II of male long, exceeding basal width of pronotum,<br>in the female slightly less; corium black, red exterior to radial vein<br>only; dorsum distinctly shining .....   | <i>nitens</i> n. sp.      |
| Antennal segment II shorter, in male about equal to basal width of pro-<br>notum; corium red, or black on inner half only .....  | 5                         |
| 5. Shining; inner half of corium black .....   | <i>californicus</i> V. D. |
| Dull, opaque; corium with narrow inner margin only black.....  | <i>nigriclavus</i> Reut.  |
| 6. Antennal segment II longer than the combined length of segments III<br>and IV .....   | <i>atriscutis</i> n. sp.  |
| Antennal segment II shorter than the combined length of segments III<br>and IV .....   | 7                         |
| 7. Pronotal margin sharply angulate just above top of coxal cleft; collar<br>sharply narrowed behind eye; black, corium with a rather narrow<br>orange colored stripe running lengthwise through outer half and ex-<br>tending along lateral margins of pronotum ..... | <i>nicholi</i> n. sp.     |
| Pronotal margin not sharply angulate above top of coxal cleft; collar<br>only slightly narrowed behind eye; corium bright red, inner angle only<br>black, pronotum broadly red, black behind calli but median line usually<br>showing red .....                        | <i>impictus</i> n. sp.    |